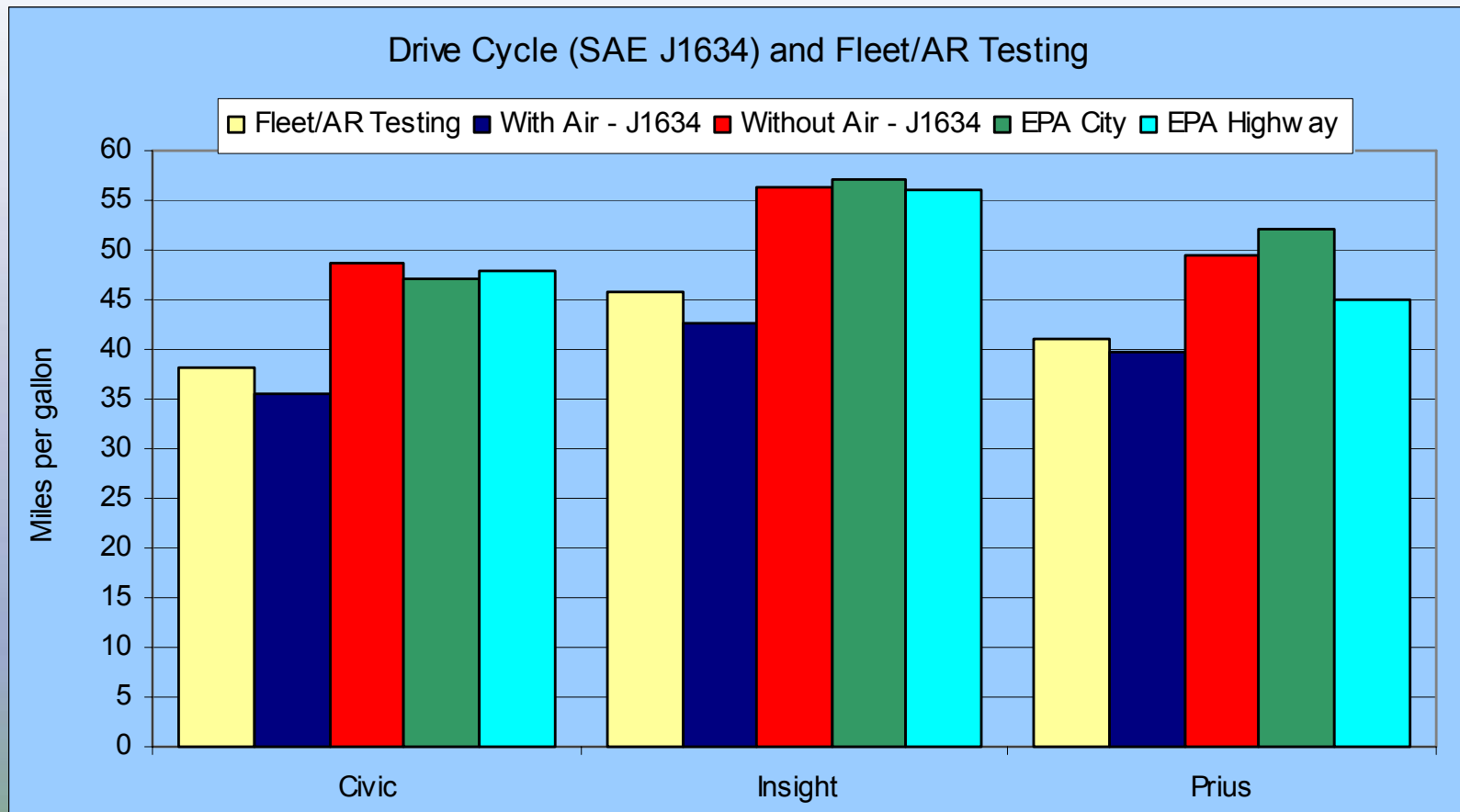


Hybrid Electric Vehicle Testing

- **Baseline Performance, fleet and accelerated reliability, and EPA testing results**



Hybrid Electric Vehicle Testing

- **2004 HEV candidate test vehicles**
 - **MY 04 Toyota Prius (started testing)**
 - **General Motors Sierra pickup**
 - **Toyota Highlander SUV**
 - **Lexus RX400 SUV**
 - **Honda Accord**
 - **Ford Escape SUV**

Hybrid Electric Vehicle Policy Support

- **\$1,500 Federal income tax deduction**
- **HOV lane access (VA, CO, FL, AZ, GA)**
- **Exemption from emissions testing (MD)**
- **Government purchases (NY, CA)**
- **State tax incentives/rebates (CA, OK, OR)**
- **VA Legislature introduced Bill in Jan '04 exempting HEVs from emissions testing**
- **Maryland General Assembly introduced bill in Jan '04 allowing HEVs in HOV lanes with single occupants**

Source: Electric Drive Transportation Association

HEV Provisions in Pending Energy Bill

- **HEVs allowed as compliance option (except Federal Fleets) for EPC Act – up to 1 credit based on fuel efficiency and battery pack maximum power**
- **Allow HEVs (as defined by states) with single occupant in HOV lanes**
- **\$250 to \$1,000 tax credit for HEVs <8,500 lbs GVW based on rechargeable energy storage system maximum power**
- **\$500 to \$3,000 tax credit for HEVs meeting vehicle mileage performance (125-250% increase in MY '00 city fuel economy)**

Source: Electric Drive Transportation Association

State/Local Idle Reduction Activities - NY

- **NY State Energy Research and Development Authority (NYSERDA) working to accelerate development and commercialization of Truck Stop Electrification (TSE) equipment, systems design, and services**
- **NY State Thruway Authority, in partnership with NYSERDA and Niagra Mohawk Power Co., share financing of a two-year \$500,000 TSE program for the installation of up to 44 IdleAire multi-service consoles at 2 sites along rest stops in Syracuse**
- **Installation of 2 shorepower TSE facilities on the Adirondack Northway pending**

State/Local Idle Reduction Activities - CA

- **\$200k EPA grant awarded to EPRI, SMUD, and other partners for idle reduction project**
 - **Demonstrate use of onboard AC power**
 - **Reimburse fleets for 50% of purchase price for any one of 3 approved idle reduction packages**
 - **Installation of technology package and driver training provided by EPRI**
- **16 AC power receptacles installed by SMUD at Sacramento's 49er Travel Plaza - free power on a first-come basis. More units upon demand**

State/Local Idle Reduction Activities - CA

- **Carl Moyer Clean Engine Incentive Program - provide fleets with up to \$1,500 per vehicle for the installation of anti-idling technologies**
 - **Subsidy of \$2,500 per vehicle for advanced technology systems such as fuel cell auxiliary power units (APUs)**
 - **All devices must be certified and operated within California for at least 100 hours per year for five years**

State/Local Idle Reduction Regulations

State	Applicability	Idling Time Limit
AZ	Heavy duty diesel vehicles >14,000 lbs GVW	5 minutes*
CA	<ul style="list-style-type: none">•Marine terminals @ ports >100,000 containers per year•Pending: limit idling MY 2007 and later on-road heavy-duty vehicles. Sleepers can use automatic start-stop or other IR technologies	<ul style="list-style-type: none">•30 minutes*•Engine off if idling >5 minutes
CO	Any motor vehicle	10 minutes in any 1 hour*
CT	<ul style="list-style-type: none">•Mobile source engine•School buses	<ul style="list-style-type: none">•3 consecutive min*•off > 3 minutes*

Source: CARB and EPA

*with some exemptions

State/Local Idle Reduction Regulations

State	Applicability	Idling Time Limit
DC	Diesel/gasoline vehicles	3 minutes*
HI	All motor vehicles	No specified time*
MD & MA	All motor vehicles	5 minutes*
MN (St. Cloud)	All motor vehicles within 2 block area of city	5 minutes*
MO (St. Louis)	All motor vehicles	10 minutes*
NV / NY	Diesel truck or bus	15 / 5 minutes
NH	Diesel/gasoline vehicles	5 min* >32°F & 15 min* >-10°F & <32°F

Source: CARB and EPA

*with some exemptions

State/Local Idle Reduction Regulations

State	Applicability	Idling Time Limit
NJ	Diesel-powered motor vehicles	3 min* / 15 min* if stopped ≥ 3 hrs
NYC	All motor vehicles	3 minutes*
PA (Philly)	Diesel vehicles >8,500 lbs GVW or passenger carrying >12	2 min for layovers / 5 min <32°F / 20 min < 20°F / 20 min buses w/AC & no open windows & > 75°F

Source: CARB and EPA

*with some exemptions